

CLAIMS

What is claimed is:

1. A system for conserving back up power in the absence of an external power source, comprising:
 - an internal power interface that receives power from an external power source and supplies power to the system;
 - an electromechanical lock that normally receives power from said internal power interface;
 - at least one power draining device associated with said system that receives power from said internal power interface;
 - a back up power supply that supplies power to said electromechanical lock and said at least one power draining device upon power loss at said internal power interface; and
 - a switch that decouples said at least one power draining device and said electromechanical lock from said back up power supply after power loss at said internal power interface;
 - said electromechanical lock selectively powered by said back up power supply after detection of an external electronic key.
2. The system of claim 1, wherein said at least one power draining device comprises at least a microcontroller, said microcontroller determining if power has been lost at said internal power interface.
3. The system of claim 1, wherein said back up power supply comprises at least one battery.
4. The system of claim 1, wherein said at least one power draining device is selectively powered by said back up power supply after detection of the external electronic key.
5. The system of claim 1, further comprising a key interface associated with said electromechanical lock, said key interface adapted to send a signal indicative of the

presence of the external electronic key to said switch to recouple said electromechanical lock to said back up power supply.

6. The system of claim 1, wherein said internal power interface sends a signal to said switch indicative of the presence of external power such that said switch couples said electromechanical lock and said at least one power draining devices to said internal power interface for powering the same when external power is present.

7. The system of claim 2, further comprising a remote communications device operatively connected to said microcontroller and that communicates with a remote central computer.

8. The system of claim 7, wherein said remote communications device is selected from the group consisting of: a wire based communications device and a wireless communications device.

9. The system of claim 7, wherein said microcontroller, after determining that power has been lost at said internal power interface, draws power from said back up power supply until communication has been achieved with the remote central computer.

10. The system of claim 7, wherein said microcontroller is selectively powered by said back up power supply after detection of the external electronic key.

11. The system of claim 10, wherein said microcontroller determines if a communication has been sent to the remote central computer after being powered by said back up power supply.

12. The system of claim 1, wherein said at least one power draining device comprises an illuminated display, a customer interface, and a VIU.

13. A device for conserving back up power in the absence of an external power source coupled to an external power port to provide power to an electromechanical lock, comprising:

an external power port that receives power from the external power source;
an electromechanical lock that normally receives power from the external power port;
at least one power draining device that receives power from the external power port; and
a back up power supply that selectively supplies power to said electromechanical lock from said back up power supply after detection of a power loss at the external power port, said selective power supplying based on detection of an external electronic key.

14. A vending machine having an internal compartment that is accessible through an external electronic key, the vending machine comprising:

a power input that receives power from an external power supply;
a back up power supply for supplying power to the vending machine when power is not received at said power input;
a switch operatively associated with said power input and said back up power supply;
a customer interface requiring power to function and through which goods are vended;
a microcontroller that controls said customer interface and requires power to function;
an electromechanical lock for preventing access to the internal compartment of the vending machine, said electromechanical lock requiring power to function;
a key interface receiving a signal from the external electronic key when the key is proximate said interface, said key interface associated with said electromechanical lock; and
said switch decoupling said customer interface, said microcontroller, and said electromechanical lock from said back up power after detection that power is not present at said power input, said switch selectively recoupling power to at least said microcontroller and said electromechanical lock when the external electronic key is proximate said key interface.

15. The vending machine of claim 14, further comprising a communications unit for communicating with a remote location information relating to the vending machine, said communications unit requiring power and being decoupled from said back up power after detection that power is not present at said power input.
16. The vending machine of claim 14, wherein said switch is operative to convey power to said microcontroller when power is present at said power input.
17. The vending machine of claim 15, wherein said microcontroller controls said switch to keep power coupled to said microcontroller and said communications unit until said communications unit has sent the information relating to the vending machine to the remote location, whereupon said microcontroller allows said switch to decouple said back up power supply.
18. The vending machine of claim 17, further comprising a memory associated with said microcontroller, said memory retaining information relating to whether said communications unit has sent the information relating to the vending machine to the remote location after power loss at said power input.
19. The vending machine of claim 15, wherein said communications unit is selected from the group consisting of a wireless communications unit and a wirebased communications unit.
20. The vending machine of claim 14, wherein said back up power supply comprises at least one battery.
21. The vending machine of claim 14, wherein power is drawn from said back up power supply when power reaches said power input, but fails to reach said switch.
22. The vending machine of claim 14, wherein said recoupling lasts long enough for an individual to access the internal compartment.
23. A method of controlling a vending machine, comprising:

powering the vending machine with an external power source;
decoupling power draining elements within the vending machine from any power source after detection of failure of power in the vending machine; and
selectively coupling an electromechanical lock to a back up power supply through a switch such that the electromechanical lock may be operated after detection of an external electronic key proximate the vending machine.

24. The method of claim 23, further comprising coupling power draining elements to the back up power supply through the switch upon detection of an external electronic key proximate the vending machine.

25. The method of claim 23, further comprising detecting proximity of the external electronic key with a key interface positioned on the vending machine.

26. The method of claim 23, further comprising communicating with a remote location periodically.

27. The method of claim 26, wherein said decoupling occurs after a communication with the remote location.

28. The method of claim 26, wherein communicating with a remote location periodically comprises wirelessly communicating with a remote location.

29. The method of claim 23, wherein decoupling power draining elements within the vending machine comprises decoupling a microcontroller from any power source.

30. The method of claim 26, wherein communicating with a remote location comprises communicating over a wire based network.

31. The method of claim 27, further comprising storing an indicator that the communication has occurred.

32. A method of controlling a system, comprising:

powering the system with an external power source;
decoupling power draining elements within the system from any power source after detection of failure of power in the system machine; and
selectively coupling an electromechanical lock to a back up power supply through a switch such that the electromechanical lock may be operated occurring after detection of an external electronic key proximate the system.

33. The method of claim 32, further comprising coupling power draining elements to the back up power supply through the switch upon detection of an external electronic key proximate a sensor associated with the system.

34. The method of claim 32, further comprising detecting proximity of the external electronic key with a key interface associated with the system.

35. The method of claim 32, further comprising communicating with a remote location periodically.

36. The method of claim 35, wherein said decoupling occurs after a communication with the remote location.

37. The method of claim 35, wherein communicating with a remote location periodically comprises wirelessly communicating with a remote location.

38. The method of claim 32, wherein decoupling power draining elements within the system comprises decoupling a microcontroller from any power source.

39. The method of claim 35, wherein communicating with a remote location comprises communicating over a wire based network.

40. The method of claim 36, further comprising storing an indicator that the communication has occurred.